

April 13, 2009

Garrett A. Stone, Esquire Brickfield, Burchette and Ritts, P.C. 1025 Thomas Jefferson Street, NW 8th Floor, West Tower Washington, D.C. 20007

Re: SCPSC Docket No. 2009-1-E

Dear Garrett:

Pursuant to the December 21, 1998 agreement entered into by and between Progress Energy Carolinas, Inc. and Nucor in Docket 1999-029-E, enclosed is documentation required by paragraph 1 of that agreement regarding PEC's actual system nuclear capacity factor calculation. As you can see, PEC met the 92.5% goal.

Sincerely,

Len S. Anthony General Counsel

Progress Energy Carolinas, Inc.

LSA:mhm

Enclosure

cc:

Charles Terreni (w/enc.)

John Flitter (w/enc.)

STAREG359

Report to NUCOR STEEL CORPORATION

Of

Progress Energy Carolinas Nuclear System Capacity Factor

Pursuant to SCPSC Docket 1999-029-E

Test Period
April 1, 2008
Through
March 31, 2009

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Progress Energy Carolinas Nuclear Capacity Factor Calculation (Unadjusted) April 1, 2008 – March 31, 2009

Net Electrical Generation during the Test Period April 1, 2008 to March 31, 2009 Reported to the NRC and available in the NRC's Public Documents Collection

	MWhs
Brunswick Unit 1	7,437,336
Brunswick Unit 2	7,145,586
Harris Unit 1	7,807,826
Robinson Unit 2	5,430,582
A – Total Net Generation	27,821,330

Unit Maximum Dependable Capacity (MW)
Reported to the NRC and available in the NRC's Public Documents Collection

	April – December 2008 MDC (MW)	January – March 2009 MDC (MW)
Brunswick Unit 1	938	938
Brunswick Unit 2	937	920
Harris Unit 1	900	900
Robinson Unit 2	710	710
B - Max Dependable Capacity for 2008	3,485	
C - Max Dependable Capacity for 2009		3,468

Period Hours in the Test Period April 1, 2008 to March 31, 2009

D - Period Hours from 4/1/08 to 12/31/08	6,601
E - Period Hours from 1/1/09 to 3/31/09	2,159

Capacity Factor Formula

 $[(A)/(B \times D) + (C \times E)] = 91.2\%$

Progress Energy Carolinas Nuclear Capacity Factor Calculation Adjusted for Refueling Outages Only and Steam Generator Replacement Outages of 100 Days or Less April 1, 2008 – March 31, 2009

Net Electrical Generation during the Test Period April 1, 2008 to March 31, 2009 Reported to the NRC and available in the NRC's Public Documents Collection

	MWhs
Brunswick Unit 1	7,437,336
Brunswick Unit 2	7,145,586
Harris Unit 1	7,807,826
Robinson Unit 2	5,430,582
Total Net Generation	27,821,330

Refueling outages of 40 days or less and steam generator replacement outages of 100 days or less

	MWh Losses
Brunswick Unit 1	644,015
Brunswick Unit 2	704,153
Harris Unit 1	0
Robinson Unit 2	732,791
Total	2,080,959

A - Total Test Period Net Generation + Adjustment for refueling	29,902,289
outages & steam generator replacement outages	

Unit Maximum Dependable Capacity (MW)
Reported to the NRC and available in the NRC's Public Documents Collection

	April – December 2008 MDC (MW)	January – March 2009 MDC (MW)
Brunswick Unit 1	938	938
Brunswick Unit 2	937	920
Harris Unit 1	900	900
Robinson Unit 2	710	710
B - Max Dependable Capacity for 2008	3,485	
C - Max Dependable Capacity for 2009		3,468

Period Hours in the Test Period April 1, 2008 to March 31, 2009

D - Period Hours from 4/1/08 to 12/31/08	6,601
E - Period Hours from 1/1/09 to 3/31/09	2,159

Capacity Factor Formula

 $[(A)/(B \times D) + (C \times E)] = 98.1\%$

Amended SC Fuel Rule Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor $\geq 92.5\%$ during the 12 month period under review. For the test period April 1, 2008 through March 31, 2009, actual period to date performance is summarized below.

Period to Date: April 1, 2008 through March 31, 2009

Nuclear System Capacity Factor Calculation (Based on net generation)

A.	Nuclear system actual	generation for SCPSC test period	A = 27,821,330 MWH
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B. Total number of hours during SCPSC test period B = 8,760 hours

C. Nuclear system MDC during SCPSC test period (see page 2) C = 3,485 MW for 2008

3,468 MW for 2009

D. Reasonable nuclear system reductions (see page 2) D = 3,259,139 MWH

E. SC Fuel Case nuclear system capacity factor: [(A+D)/(B*C)]*100 = 101.9%

NOTE:

If Line Item $E \ge 92.5\%$, presumption of utility's minimum cost operation If Line Item E < 92.5%, utility has burden of proof of reasonable operations

Note: Brunswick 2 MDC value was decreased by 17 MW, effective 12/31/08, primarily reflecting the impact of changes associated with calculation methods (NERC requires annual evaluation of environmental and operational parameters; former process used three to five-year average), environmental monitoring and compliance, and the impact of equipment degradation.

Amended SC Fuel Rule Nuclear System Capacity Factor Calculation Reasonable Nuclear System Reductions Period to Date: <u>April 1, 2008</u> to <u>March 31, 2009</u>

N. J. U. it N I Designation	BNP	BNP	HNP	RNP	Nuclear
Nuclear Unit Name and Designation	Unit # 1	Unit # 2	Unit # 1	Unit # 2	System
Unit MDC (April – December 2008)	938 MW	937 MW	900 MW	710 MW	3,485 MW
Unit MDC (January – March 2009)	938 MW	920 MW	900 MW	710 MW	3,468 MW
Reasonable refueling outage time (MWH)	644,015	704,153	0	732,791	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	241,928	287,000	229,209	271,491	
Reasonable coast down power reductions (MWH)	0	5,239	0	9,720	
Reasonable power ascension power reductions (MWH)	42,784	31,466	0	21,070	
Prudent NRC required testing outages (MWH)	8,857	23,271	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	6,145	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	937,584	1,057,274	229,209	1,035,072	
Total reasonable outage time exclusions [carry to Page 1, Line D]	THE STATE OF THE S				3,259,139

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ATTACHMENT A

		Mor	thly Genera	ation	
Month	BNP 1	BNP 2	BNP	HNP	RNP
April 2008	7,406	676,182	683,588	661,179	541,202
May 2008	704,958	697,370	1,402,328	679,592	554,155
June 2008	686,283	662,438	1,348,721	648,293	524,773
July 2008	707,636	691,106	1,398,742	672,513	538,858
August 2008	702,990	658,231	1,361,221	436,426	536,268
September 2008	689,112	566,245	1,255,357	656,281	423,082
October 2008	716,845	699,951	1,416,796	686,147	-1,964
November 2008	452,952	491,759	944,711	668,900	141,211
December 2008	712,475	704,777	1,417,252	691,631	524,457
January 2009	719,187	696,451	1,415,638	693,809	568,589
February 2009	630,842	604,133	1,234,975	624,890	513,513
March 2009	706,650	-3,057	703,593	688,165	566,438
TOTAL	7,437,336	7,145,586	14,582,922	7,807,826	5,430,582

Carolina Fleet
1,885,969
2,636,075
2,521,787
2,610,113
2,333,915
2,334,720
2,100,979
1,754,822
2,633,340
2,678,036
2,373,378
1,958,196
27,821,330

	Monthly Capacity Factor (Unadjusted)								
Month	BNP 1	BNP 2	BNP	HNP	RNP				
MDC (Apr - Dec 2008)	938	937	1,875	900	710				
MDC (Jan - Mar 2009)	938	920	1,858	900	710				
April 2008	1.1%	100.2%	50.6%	102.0%	105.9%				
May 2008	101.0%	100.0%	100.5%	101.5%	104.9%				
June 2008	101.6%	98.2%	99.9%	100.0%	102.7%				
July 2008	101.4%	99.1%	100.3%	100.4%	102.0%				
August 2008	100.7%	94.4%	97.6%	65.2%	101.5%				
September 2008	102.0%	83.9%	93.0%	101.3%	82.8%				
October 2008	102.7%	100.4%	101.6%	102.5%	-0.4%				
November 2008	67.0%	72.8%	69.9%	103.1%	27.6%				
December 2008	102.1%	101.1%	101.6%	103.3%	99.3%				
January 2009	103.1%	101.7%	102.4%	103.6%	107.6%				
February 2009	100.1%	97.7%	98.9%	103.3%	107.6%				
March 2009	101.4%	-0.4%	50.5%	102.9%	107.4%				
TOTAL	90.5%	87.4%	89.0%	99.0%	87.3%				

Cá	arolina Flee
	3,485
	3,468
	75.2%
	101.7%
	100.5%
	100.7%
	90.0%
	93.0%
	81.0%
	69.8%
	101.6%
	103.8%
	101.8%
	75.6%
	91.2%

	Ye	ar to Date	Generation (Unadjusted	1)
Month	BNP 1	BNP 2	BNP	HNP	RNP
April 2008	7,406	676,182	683,588	661,179	541,202
May 2008	712,364	1,373,552	2,085,916	1,340,771	1,095,357
June 2008	1,398,647	2,035,990	3,434,637	1,989,064	1,620,130
July 2008	2,106,283	2,727,096	4,833,379	2,661,577	2,158,988
August 2008	2,809,273	3,385,327	6,194,600	3,098,003	2,695,256
September 2008	3,498,385	3,951,572	7,449,957	3,754,284	3,118,338
October 2008	4,215,230	4,651,523	8,866,753	4,440,431	3,116,374
November 2008	4,668,182	5,143,282	9,811,464	5,109,331	3,257,585
December 2008	5,380,657	5,848,059	11,228,716	5,800,962	3,782,042
January 2009	6,099,844	6,544,510	12,644,354	6,494,771	4,350,631
February 2009	6,730,686	7,148,643	13,879,329	7,119,661	4,864,144
March 2009	7,437,336	7,145,586	14,582,922	7,807,826	5,430,582

	Carolina Fleet
	1,885,969
	4,522,044
	7,043,831
	9,653,944
	11,987,859
	14,322,579
	16,423,558
Ī	18,178,380
	20,811,720
	23,489,756
	25,863,134
	27,821,330

	Year to Date Capacity Factor (Unadjusted)							
Month	BNP 1	BNP 2	BNP	HNP	RNP			
April 2008	1.1%	100.2%	50.6%	102.0%	105.9%			
May 2008	51.9%	100.1%	76.0%	101.8%	105.4%			
June 2008	68.3%	99.5%	83.9%	101.2%	104.5%			
July 2008	76.7%	99.4%	88.0%	101.0%	103.9%			
August 2008	81.6%	98.4%	90.0%	93.7%	103.4%			
September 2008	84.9%	96.0%	90.5%	95.0%	100.0%			
October 2008	87.5%	96.7%	92.1%	96.1%	85.5%			
November 2008	85.0%	93.7%	89.3%	96.9%	78.3%			
December 2008	86.9%	94.6%	90.7%	97.6%	80.7%			
January 2009	88.5%	95.3%	91.9%	98.2%	83.4%			
February 2009	89.5%	95.5%	92.5%	98.7%	85.5%			
March 2009	90.5%	87.4%	89.0%	99.0%	87.3%			

Carolina Flo	eet
75.2%	
88.6%	
92.5%	
94.6%	
93.7%	
93.6%	
91.8%	
89.1%	
90.5%	
91.8%	
92.6%	
91.2%	

ATTACHMENT B

Brunswick Unit 1 April 1, 2008 - March 31, 2009 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-08	644,015	0	0	21,454	0	0	0	0	665,469
May-08	0	117	0	9,439	0	0	0	0	9,556
Jun-08	0	0	0	0	0	0	0	0	0
Jul-08	0	0	0	0	0	0	0	0	0
Aug-08	0	319	0	0	3,866	0	0	0	4,185
Sep-08	0	0	0	0	0	0	0	0	0
Oct-08	0	0	0	0	0	0	0	0	0
Nov-08	0	221,092	0	11,534	0	0	0	0	232,626
Dec-08	0	2,934	0	357	0	0	0	0	3,291
Jan-09	0	0	0	0	0	0	0	0	0
Feb-09	0	15,955	0	0	0	0	0	0	15,955
Mar-09	0	1,511	0	0	4,991	0	0	0	6,502
Total	644,015	241,928	0	42,784	8,857	0	0	0	937,584

Brunswick Unit 2 April 1, 2008 - March 31, 2009 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-08	0	378	0	0	5,642	0	0	0	6,020
May-08	0	141	0	0	0	0	0	0	141
Jun-08	0	239	0	0	5,703	0	0	0	5,942
Jul-08	0	0	0	0	0	0	0	0	0
Aug-08	0	31,400	0	0	0	0	0	0	31,400
Sep-08	0	79,101	0	19,898	0	0	6,145	0	105,144
Oct-08	0	244	0	0	663	0	0	0	907
Nov-08	0	172,671	0	11,568	3,458	0	0	0	187,697
Dec-08	0	330	0	0	0	0	0	0	330
Jan-09	0	224	0	0	7,805	0	0	0	8,029
Feb-09	20,593	2,272	5,239	0	0	0	0	0	28,104
Mar-09	683,560	0	0	0	0	0	0	0	683,560
Total	704,153	287,000	5,239	31,466	23,271	0	6,145	0	1,057,274

Harris Unit 1 April 1, 2008 - March 31, 2009 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-08	0	0	0	0	0	0	0	0	0
May-08	0	0	0	0	0	0	0	0	0
Jun-08	0	0	0	0	0	0	0	0	0
Jul-08	0	0	0	0	0	0	0	0	0
Aug-08	0	229,188	0	0	0	0	0	0	229,188
Sep-08	0	0	0	0	0	0	0	0	0
Oct-08	0	0	0	0	0	0	0	0	0
Nov-08	0	0	0	0	0	0	0	0	0
Dec-08	0	0	0	0	0	0	0	0	0
Jan-09	0	21	0	0	0	0	0	0	21
Feb-09	0	0	0	0	0	0	0	0	0
Mar-09	0	0	0	0	0	0	0	0	0
Total	0	229,209	0	0	0	0	0	0	229,209

Robinson Unit 2 April 1, 2008 - March 31, 2009 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-08	0	0	0	0	0	0	0	0	0
May-08	0	0	0	0	0	0	0	0	0
Jun-08	0	0	0	0	0	0	0	0	0
Jul-08	0	0	0	0	0	0	0	0	0
Aug-08	0	213	0	0	0	0	0	0	213
Sep-08	84,928	0	9,720	0	0	0	0	0	94,648
Oct-08	528,240	0	0	0	0	0	0	0	528,240
Nov-08	119,623	234,453	0	17,819	0	0	0	0	371,895
Dec-08	0	36,825	0	3,251	0	0	0	0	40,076
Jan-09	0	0	0	0	0	0	0	0	0
Feb-09	0	0	0	0	0	0	0	0	0
Mar-09	0	0	0	0	0	0	0	0	0
Total	732,791	271,491	9,720	21,070	0	0	0	0	1,035,072

PEC Nuclear System Total April 1, 2008 – March 31, 2009 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-08	644,015	378	0	21,454	5,642	0	0	0	671,489
May-08	0	258	0	9,439	0	0	0	0	9,697
Jun-08	0	239	0	0	5,703	0	0	0	5,942
Jul-08	0	0	0	0	0	0	0	0	0
Aug-08	0	261,120	0	0	3,866	0	0	0	264,986
Sep-08	84,928	79,101	9,720	19,898	0	0	6,145	0	199,792
Oct-08	528,240	244	0	0	663	0	0	0	529,147
Nov-08	119,623	628,216	0	40,921	3,458	0	0	0	792,218
Dec-08	0	40,089	0	3,608	0	0	0	0	43,697
Jan-09	0	245	0	0	7,805	0	0	0	8,050
Feb-09	20,593	18,227	5,239	0	0	0	0	0	44,059
Mar-09	683,560	1,511	0	0	4,991	0	0	0	690,062
Total	2,080,959	1,029,628	14,959	95,320	32,128	0	6,145	0	3,259,139